



US01 corrected sequence listing.txt
SEQUENCE LISTING

<110> Shi, Wenyuan
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Trinh, Kham
Wims, Letitia
Chen, Li
Anderson, Maxwell
Qi, Fengxia

<120> Anti-Microbial Targeting Chimeric Pharmaceutical

<130> 59157.8007.US01

<140> US 10/077,624

<141> 2002-02-14

<150> US 09/910,358

<151> 2001-07-19

<150> US 09/378,577

<151> 1999-08-20

<160> 31

<170> PatentIn version 3.4

<210> 1

<211> 563

<212> DNA

<213> Artificial sequence

<220>

<223> Histatin 5/linker peptide/SWLA3 VH chain construct synthesized
using sequential PCR techniques

<220>

<221> misc_feature

<222> (69)..(140)

<223> Histatin 5 peptide

<220>

<221> misc_feature

<222> (141)..(188)

<223> Glycine/serine linker peptide

<400> 1

ggatatccac catggacttc gggttgagct tggttttcct tgtccttact ttaaaagggtg 60

tccagtgtga tagccacgct aagcggcacc acggatataa gcggaagttc cacgagaagc 120

accactcgca cagaggatac tctggtggcg gtggctcggg cggagggtggg tcgggtggcg 180

gcggatccga cgtgaagctt gtggagtctg ggggaggctt agtgaaccct ggagggtccc 240

tgaaactctc ctgtgcagcc tctggattca ctttcagtag ctataccatg tcttgggttc 300

gccagactcc ggagaagagg ctggagtggg tcgcatccat tagtagtggt ggtacttaca 360

cctactatcc agacagtgtg aagggccgat tcaccatctc cagagacaat gccaagaaca 420

ccctgtacct gcaaatagacc agtctgaagt ctgaggacac agccatgtat tactgttcaa 480

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gagatgacgg ctctacggc tcctattact atgctatgga ctactggggt caaggaacct 540
cagtcaccgt ctcttcagct agc 563

<210> 2
<211> 24
<212> PRT
<213> Homo sapiens
<400> 2

Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
1 5 10 15

Lys His His Ser His Arg Gly Tyr
20

<210> 3
<211> 16
<212> PRT
<213> Artificial sequence

<220>
<223> Linker peptide used to separate antimicrobial peptides from
antibody VH chains in chimeric antibody fusion protein constructs

<400> 3

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 4
<211> 165
<212> PRT
<213> Artificial sequence

<220>
<223> Histatin 5/linker peptide/SWLA3 VH chain construct synthesized
using sequential PCR techniques

<220>
<221> MISC_FEATURE
<222> (1)..(24)
<223> Histatin 5 peptide

<220>
<221> MISC_FEATURE
<222> (25)..(40)
<223> Glycine/serine linker peptide

<400> 4

Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
1 5 10 15

Lys His His Ser His Arg Gly Tyr Ser Gly Gly Gly Gly Ser Gly Gly
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20

25

30

Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Lys Leu Val Glu Ser Gly
35 40 45

Gly Gly Leu Val Asn Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala
50 55 60

Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arg Gln Thr
65 70 75 80

Pro Glu Lys Arg Leu Glu Trp Val Ala Ser Ile Ser Ser Gly Gly Thr
85 90 95

Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg
100 105 110

Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Thr Ser Leu Lys Ser
115 120 125

Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp Gly Ser Tyr Gly
130 135 140

Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr
145 150 155 160

Val Ser Ser Ala Ser
165

<210> 5
<211> 533
<212> DNA
<213> Artificial sequence

<220>
<223> Dhvar 1/linker peptide/SWLA3 VH chain construct synthesized using sequential PCR techniques

<220>
<221> misc_feature
<222> (69)..(110)
<223> Dhvar 1 peptide

<220>
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<222> (111)..(158)
<223> Glycine/serine linker peptide

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tccagtgtaa gcggtgtgtt aaggagctca agttcagcct gcgcaagtac tctggtggcg 120

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gtggctcggg cggaggtggg tcgggtggcg gcggatccga cgtgaagctt gtggagtctg 180
 ggggaggctt agtgaaccct ggagggtccc tgaaactctc ctgtgcagcc tctggattca 240
 ctttcagtag ctataccatg tcttgggttc gccagactcc ggagaagagg ctggagtggg 300
 tcgcatccat tagtagtggt ggtacttaca cctactatcc agacagtgtg aagggccgat 360
 tcaccatctc cagagacaat gccaagaaca ccctgtacct gcaaataacc agtctgaagt 420
 ctgaggacac agccatgtat tactgttcaa gagatgacgg ctcttacggc tcctattact 480
 atgctatgga ctactggggt caaggaacct cagtcaccgt ctcttcagct agc 533

<210> 6
 <211> 14
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic antimicrobial peptide based on histatin 5

<400> 6

Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr
 1 5 10

<210> 7
 <211> 155
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Dhvar 1/linker peptide/SWLA3 VH chain construct synthesized using sequential PCR techniques

<220>
 <221> MISC_FEATURE
 <222> (1)..(14)
 <223> Dhvar 1 peptide

<220>
 <221> MISC_FEATURE
 <222> (15)..(30)
 <223> Glycine/serine linker peptide

<400> 7

Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr Ser Gly
 1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val
 20 25 30

Lys Leu Val Glu Ser Gly Gly Gly Leu Val Asn Pro Gly Gly Ser Leu
 35 40 45

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Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met
50 55 60

Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Ser
65 70 75 80

Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly
85 90 95

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
100 105 110

Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg
115 120 125

Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly
130 135 140

Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
145 150 155

<210> 8
<211> 89
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer used to generate histatin 5/SWLA3 chimeric antibody
fusion protein construct

<400> 8
caccactcgc acagaggata ctctggtggc ggtggctcgg gcggaggtgg gtcgggtggc 60
ggcggatccg acgtgaagct tgtggagtc 89

<210> 9
<211> 84
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer used to generate histatin 5/SWLA3 chimeric antibody
fusion protein construct

<400> 9
ggtgtccagt gtgatagcca cgctaagcgg caccacggat ataagcggaa gttccacgag 60
aagcaccact cgcacagagg atac 84

<210> 10
<211> 74
<212> DNA
<213> Artificial sequence

US01 corrected sequence listing.txt

<220>
 <223> PCR primer used to generate histatin 5/SWLA3 chimeric antibody fusion protein construct

<400> 10
 gatatccacc atggacttcg ggttgagctt ggttttcctt gtccttactt taaaagggtgt 60
 ccagtgtgat agcc 74

<210> 11
 <211> 87
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer used to generate dhvar 1/SWLA3 chimeric antibody fusion protein construct

<400> 11
 gttcagcctg cgcaagtact ctggtggcgg tggctcgggc ggaggtgggt cgggtggcgg 60
 cgcatccgac gtgaagcttg tggagtc 87

<210> 12
 <211> 69
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer used to generate dhvar 1/SWLA3 chimeric antibody fusion protein construct

<400> 12
 gtccttactt taaaagggtgt ccagtgtgtaag cggctgttta aggagctcaa gttcagcctg 60
 cgcaagtac 69

<210> 13
 <211> 65
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer used to generate dhvar 1/SWLA3 chimeric antibody fusion protein construct

<400> 13
 ggatattcac catggacttc gggttgagct tggttttcct tgtccttact taaaagggtg 60
 tccag 65

<210> 14
 <211> 39
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer used to generate histatin 5/SWLA3 and dhvar 1/SWLA3

US01 corrected sequence listing.txt
chimeric antibody fusion protein constructs

<400> 14
tgggtcgacw gatggggstg ttgtgctagc tgaggagac 39

<210> 15
<211> 18
<212> PRT
<213> Sus scrofa

<400> 15
Arg Gly Gly Arg Leu Cys Tyr Cys Arg Arg Arg Phe Cys Val Cys Val
1 5 10 15

Gly Arg

<210> 16
<211> 57
<212> DNA
<213> Sus scrofa

<400> 16
aggggaggtc gcctgtgcta ttgtaggcgt aggttctgcg tctgtgtcgg acgagga 57

<210> 17
<211> 18
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic antimicrobial peptide based on Ovis aries SMAP-29

<400> 17
Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile Lys Lys
1 5 10 15

Tyr Gly

<210> 18
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for amplification of protegrin PG-1

<220>
<221> misc_feature
<222> (8)..(15)
<223> SapI restriction enzyme cleavage site

<400> 18

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 ggtggttgct cttccaacag gggaggtcgc ctgtgc

<210> 19
 <211> 23
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Reverse primer for amplification of protegrin PG-1

<220>
 <221> misc_feature
 <222> (3)..(8)
 <223> BamHI restriction enzyme cleavage site

<400> 19
 ccggatcctc gtccgacaca gac 23

<210> 20
 <211> 23
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Forward primer for amplification of glycine/serine linker

<400> 20
 ggggatccgg tggcggtggc tcg 23

<210> 21
 <211> 26
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Reverse primer for amplification of glycine/serine linker

<220>
 <221> misc_feature
 <222> (4)..(9)
 <223> ClaI restriction enzyme cleavage site

<400> 21
 aacatcgata gatccgccgc caccgc 26

<210> 22
 <211> 23
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Forward primer for amplification of SWLA3 VL chain

<220>
 <221> misc_feature
 <222> (3)..(8)

<223> ClaI restriction enzyme cleavage site
 <400> 22
 ggatcgatgt tgtgatgacc cag 23

<210> 23
 <211> 31
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Reverse primer for amplification of SWLA3 VL chain

<220>
 <221> misc_feature
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 <223> SalI restriction enzyme cleavage site

<400> 23
 gcgggtcgac cgacttacgt ttcagctcca g 31

<210> 24
 <211> 29
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Forward primer for amplification of SWLA3 VH chain

<220>
 <221> misc_feature
 <222> (5)..(10)
 <223> SalI restriction enzyme cleavage site

<400> 24
 gcgggtcgac gtgaagctgg tggagtctg 29

<210> 25
 <211> 30
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Reverse primer for amplification of SWLA3 VH chain

<220>
 <221> misc_feature
 <222> (10)..(15)
 <223> NheI restriction enzyme cleavage site

<400> 25
 ggggtgttgag ctagctgaag agacggtgac 30

<210> 26
 <211> 24
 <212> PRT

<213> Artificial sequence

<220>

<223> Synthetic linker for use in protegrin fusion protein

<400> 26

Leu Asp Pro Lys Ser Cys Glu Arg Ser His Ser Cys Pro Pro Cys Gly
1 5 10 15

Gly Gly Ser Gly Gly Gly Thr Ser
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<210> 27

<211> 72

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic linker for use in protegrin fusion protein

<400> 27

ctcgacccaa agagctgcga gcggagccac agctgcccac cgtgcggggg tgggtccggc 60

ggtggcacta gt 72

<210> 28

<211> 28

<212> DNA

<213> Artificial sequence

<220>

<223> Forward primer for amplification of SWLA3 VH chain/CH3 linker

<220>

<221> misc_feature

<222> (5)..(10)

<223> NheI restriction enzyme cleavage site

<400> 28

gtgggctagc ctcgacccaa agagctgc 28

<210> 29

<211> 38

<212> DNA

<213> Artificial sequence

<220>

<223> Reverse primer for amplification of SWLA3 VH chain/CH3 linker

<400> 29

aggttctcgg ggctgcccac tagtgccacc gccggacc 38

<210> 30

<211> 19

<212> DNA

<213> Artificial sequence

US01 corrected sequence listing.txt

<220>
<223> Forward primer for amplification of human CH3 gene fragment

<400> 30
gggcagcccc gagaacaac 19

<210> 31
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for amplification of human CH3 gene fragment

<220>
<221> misc_feature
<222> (7)..(12)
<223> PstI restriction enzyme cleavage site

<400> 31
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